

REMARKS

This Amendment, submitted in response to the Office Action dated March 27, 2007, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-5 are all the claims pending in the application.

Claims 3-5 are allowed.

Claims 1 and 2 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicant submits that the amendment to independent claim 1 made herein obviates the rejection. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection.

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bigo et al. "5.12 Tbit/s (128x40 Gbit/s WDM) transmission over 3x1000 km of TeraLight Fibre," (hereinafter "Bigo"). Applicant respectfully traverses this rejection.

Independent claim 1 now recites:

A method for modulating a non-return to zero (NRZ) signal transmitted to a receiver utilizing alternating left side and right side filtering for adjacent channels having alternating channel spacing, the method comprising:

modulating channels, which are to be subjected to the right side filtering at the receiver, with a positive chirp; and

modulating channels, which are to be subjected to the left
side filtering at the receiver, with a negative chirp.¹

Thus, independent claim 1 requires, *inter alia*, a receiver.

Further, Applicant submits that Bigo does not teach or suggest the unique feature of modulating channels, which are to be subjected to the right side filtering at the receiver, with a positive chirp, and modulating channels, which are to be subjected to the left side filtering at the receiver, with a negative chirp.

Bigo, by contrast, discloses a single VSB filter, in front of the receiver Rx, which filters 128 channels transmitted over a 100 km TeraLight™ connection.² The signals transmitted to the receiver within the 128 channels cover the C and L bands.³ In each band, channels are modulated independently by two Mach-Zehnder (M-Z) modulators.⁴ None of the signals however are subjected to a positive chirp or a negative chirp. Thus, Bigo fails to teach or suggest modulating channels, which are to be subjected to the right side filtering at the receiver, with a positive chirp, and modulating channels, which are to be subjected to the left side filtering at the receiver, with a negative chirp.

The Examiner asserts that “[t]he signal generated by the system of Bigo shown in FIG. 2 provides left-side filtering and right-side filtering.” However, Applicant notes that it is the VSB

¹ Emphasis added.

² See Bigo, FIG. 2, and page 1, col. 1, second paragraph.

³ See Bigo, FIG. 2, and page 1, col. 1, second paragraph.

⁴ See Bigo, FIG. 2, and page 1, col. 2, first paragraph.

filter at the receiver side (i.e., in front of the receiver Rx) which filters the 128 channels, not the receiver itself. Thus, Bigo fails to teach or suggest left or right side filtering in a receiver.

The Examiner further asserts that this indicates that the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element discloses in the specification. Based on this, the Examiner concludes it would have been obvious that such result is obtained by providing positive or negative chirp. Applicant respectfully disagrees with the Examiner's position.

The M-Z modulators in Bigo modulate all channels the same. Bigo is silent on modulating some channels with positive chirp and some channels with negative chirp. Thus, Bigo does not teach or suggest modulating channels to be subjected to right side filtering in the receiver with a positive chirp, and modulating channels to be subjected to left side filtering in the receiver with a negative chirp. Moreover, Applicant submits that modulating with positive chirp is not equivalent to modulating with negative chirp. Therefore, Applicant submits that modulating some channels with positive and some channels with negative chirp is not equivalent to modulating all channels the same.

Accordingly, Applicant submits that independent claim 1 is patentable over Bigo, at least for the reasons stated above, and further, that dependent claim 2 is patentable over Bigo, at least by virtue of its dependency on claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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